



# S. HOWES

SINCE 1856

## SAMPLE APPLICATIONS

- FOODS
- CHEMICAL
- BIOMASS
- BIOFUELS
- PAPER AND PULP
- DAIRY
- MINERALS
- PETROCHEMICAL
- ... AND MANY MORE

# HEATING/COOLING SCREW CONVEYORS

## SAMPLE PROCESSES

- HEAT CURING
- COOLING/FREEZING
- MICROBIAL KILL
- POLYMERIZATION
- SINTERING/CALCINING
- DEWATERING
- DRYING

*TESTING & RENTAL  
UNITS AVAILABLE*

## TUBULAR MODELS



## U-TROUGH MODELS

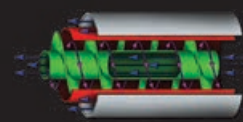


ISO 9001:2015



CARRIER  
PROCESS  
EQUIPMENT  
GROUP, INC.

# HEATING/COOLING CONVEYORS



## ENGINEERED-TO-ORDER

S. Howes can assist in the design of heating and cooling equipment for your specific application. All materials are unique in their thermal heat transfer characteristics. Such factors include: particle size, density, viscosity, etc. After establishing a heat transfer coefficient, among other factors, S. Howes staff can assist in the specification of equipment for your application. Typically, this requires material testing in our lab. When testing in our lab may not be practical, equipment can be shipped to your facility for on-site testing. A technician is available to assist your staff in operating any equipment. Leverage our experience!

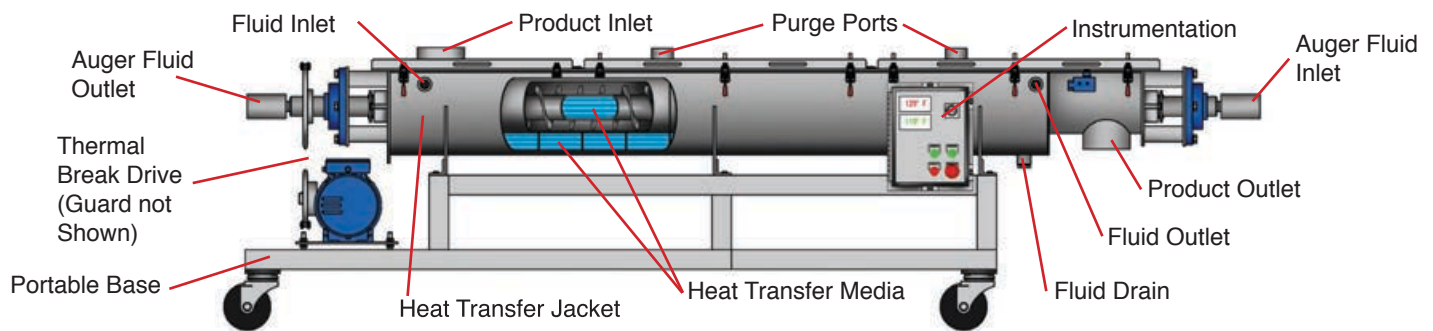
## APPLICATIONS FOR HEATING/COOLING SCREW CONVEYORS

PROCESS	THROUGHPUT CAPACITY*	TEMPERATURE RANGE*	SCREW DIAMETER RANGE	THERMAL TRANSFER CONTACT AREA	HEAT/COOLING MEDIA
COOLING	As low as 100 lbs./hour As high as 5 tons/hour	MIN (out) 60 °F MAX (in) 1000 °F	4" to 36"	up to 300 sq. ft.	Water Glycol
HEATING	As low as 100 lbs./hour As high as 2 tons/hour	MIN (in) 50 °F MAX (out) 400 °F	4" to 36"	up to 300 sq. ft.	Water Steam Glycol Hot Oil
DRYING/ DEWATERING	Can remove as much as 50 lbs. of water/hour	MIN (in) 100 °F	4" to 36"	up to 300 sq. ft.	Steam Hot Oil







5 to 200 psi  
(over 14.9 psi re-quires ASME stamp)

\*Ranges shown here are typical but not absolute. Different configurations may be designed to fit your needs. Contact S. Howes to discuss your specific application.

## SAMPLE COOLING/HEATING CONVEYOR LAYOUT



## DESIGN OPTIONS FOR HEATING/COOLING CONVEYORS

	<b>AUGER TYPES</b> <ul style="list-style-type: none"> <li>• Single/Twin/Multi screw</li> <li>• Heated/Cooled shaft</li> <li>• Hollow flights</li> <li>• Ribbon or cut flighting</li> </ul>		<b>INSTRUMENTATION</b> <ul style="list-style-type: none"> <li>• Temperature in/out readout</li> <li>• Flowmeters</li> <li>• Variety of pressure gauges available</li> <li>• Customized control panels</li> </ul>
	<b>SEAL TYPES</b> <ul style="list-style-type: none"> <li>• Rotating Mechanical</li> <li>• Packing Gland</li> <li>• Custom</li> </ul>		<b>HEATERS/COOLERS</b> <ul style="list-style-type: none"> <li>• Single, dual or triple zone configurations</li> <li>• -5°F to 600°F temp control</li> <li>• Designed for your needs</li> </ul>
	<b>JACKET TYPES</b> <ul style="list-style-type: none"> <li>• Cooling jackets</li> <li>• Heating jackets</li> <li>• Integral or bolt-on</li> <li>• ASME "U" and "R" stamp</li> </ul>		<b>CUSTOMIZATION</b> <ul style="list-style-type: none"> <li>• Inlet/outlet custom designs</li> <li>• Built-to-order support stands</li> <li>• NDE and X-ray options</li> <li>• Various insulation option</li> </ul>